A New Species of Brachystelma (Apocynaceae) from South Tropical Africa

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Abstract. The new species *Brachystelma nutans* Bruyns (Apocynaceae, Asclepiadoideae) is described from the botanically relatively little-known Mount Namuli complex in the northern part of Zambézia Province of northern Moçambique.

Key words: Apocynaceae, Brachystelma, Moçambique.

Brachystelma Sims (Apocynaceae, Asclepiadoideae, Ceropegieae) consists of over 100 species that are widely distributed in sub-Saharan Africa. The main concentration of more than 70 species is found in southern Africa (Dyer, 1983; Bruyns, 1995), but there are a few species that occur as far afield as India and Australasia (Forster, 1996). The species are often poorly recorded, because the plants are difficult to locate in habitat and are geophytic, only appearing above the ground during the rainy season. The situation in Moçambique is illustrative of this. Information in the main herbaria indicated that the only species recorded from Moçambique was B. simplex Schlechter. However, my own exploration since 1998 has revealed that at least 10 species occur in Moçambique. Most of these are widely distributed in south tropical or East Africa (especially in Zimbabwe, Malawi, and Tanzania), but the present new species is known only from the two collections cited and seems to be endemic to the Mount Namuli complex. This series of granite peaks rises to over 2400 m and is the highest mountain range in the country.

Brachystelma nutans Bruyns, sp. nov. TYPE: Moçambique. Zambézia: Namuli, 1500–2000 m, 4 Jan. 2004, P. V. Bruyns 9729 (holotype, BOL; isotype, MO). Figure 1.

Ab omnibus speciebus *Brachystelmatis* cognitis floribus grandioribus solitariis nutantibus, pedicellis longis et lobis corollae decrescentibus paulatim base ad apicem differt.

Small herb arising from flattened discoid tuber up to 10 cm diam.; *stems* prostrate to ascending, 5–20 cm, 1–2 mm thick, puberulous, reddish green.

Leaves linear, $40-80 \times 3-5$ mm, green, puberulous along midrib underneath only, sessile. Inflorescences many, alongside almost every node except first 2 above tuber, each 1-flowered; pedicel 20–25 mm, brown, puberulous, ascending with decurved apex; sepals 5 mm, brown. Corolla nodding, outside green, puberulous, inside green toward base, red-brown toward apex of lobes, pubescent with fine white hairs, deeply lobed, with short cupular tube ca. 1 mm deep; lobes 13–16 \times 3 mm at base, erect and incurved at tips, linear, acute. Corona 3.5 \times 4 mm; outer lobes ca. 2.5 mm, bifid to well below middle into ascending flattened-obtuse lobules, yellow-green with white hairs on inside mainly in lower half; inner lobes ca. I mm, adpressed to backs of anthers and just exceeding them, narrowly deltoid, acute, yellow-green with green tips, with white hairs mainly near bases. Fruit and seed unknown.

Vegetatively Brachystelma nutans is not readily distinguishable from B. lineare A. Richard. However, florally it is unlike any other known species. The nodding flowers on fairly long but solitary pedicels are tinged with red-brown toward the tips of the lobes and never open up to become fully rotate. While the corolla lobes are comparatively long, they do not have the very broad base above which the lobes are almost filiform that one finds in B. lineare and B. floribundum Turrill. Furthermore, in both of these species the flowers are densely clustered in each inflorescence on short pedicels (solitary and on long pedicels in B. nutans) and are considerably larger than in B. nutans. In the new species the outer corona consists of fairly long, deeply bifid lobes. This is similar to the position in B. floribundum, but in B. floribundum the entire gynostegium is much larger and lies in the center of a broad, flattened base of the corolla. In B. nutans the corona is closely contained within the short but cuplike corolla tube. The outer corona of *B. nutans* is very different from that in B. lineare, where the lobes form shoulders behind the inner lobes and are deeply incised in the middle. The relatively long outer corona lobes of B. nutans are reminiscent of B. circinatum E. Meyer, and the two also share unusually short and broad pollinia (relative to the anther in which they are

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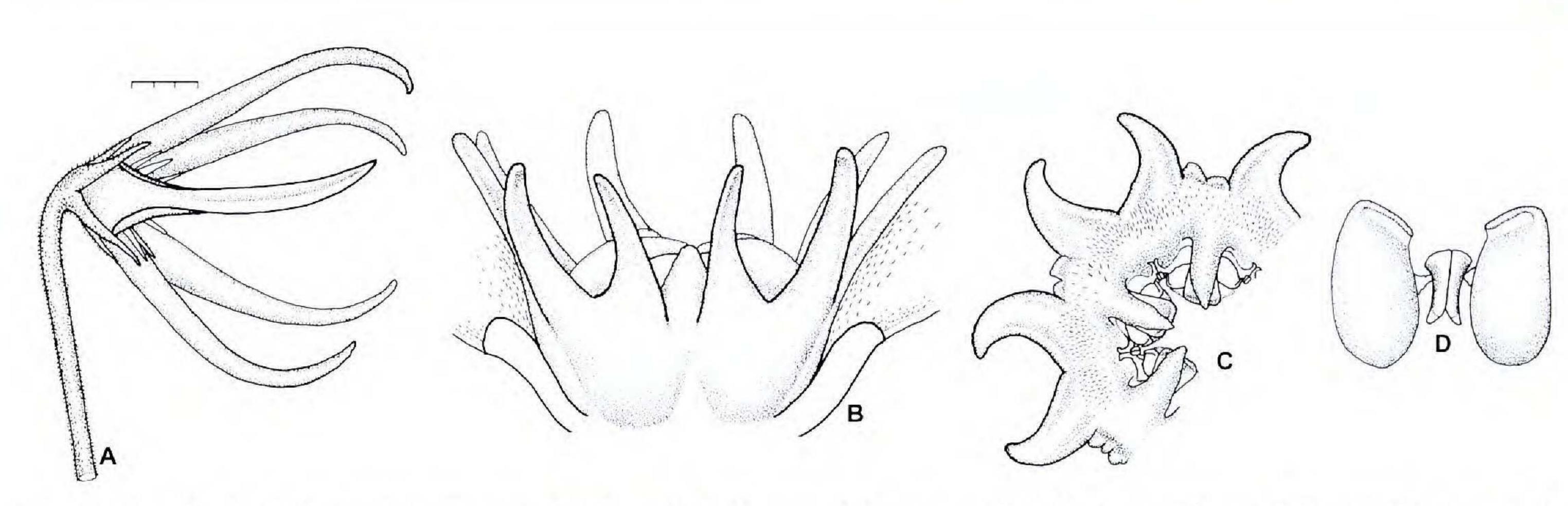


Figure 1. Brachystelma nutans (Bruyns 9729). —A. Side view of flower. —B. Side view of base of dissected flower and gynostegium. —C. Face view of part of gynostegium. —D. Pollinarium. Scale bar: A = 3 mm; B, C = 1 mm (at A); D = 0.25 mm (at A).

produced). However, *B. circinatum* differs in its very short, clustered pedicels, the very slender corolla lobes that remain joined at their tips, the hairs along the length of the outer corona lobes, and the much more erect habit of the plant.

Brachystelma nutans was found in shallow soils overlaying solid granite surfaces on Mount Namuli, where it was observed at two separate localities. In one of these it was the only species of Brachystelma present, but in the other it occurred together with B. buchananii N. E. Brown, which grew in slightly deeper ground between outcrops of granite.

Paratype. MOÇAMBIQUE. Zambézia: central Namuli, ca. 1400 m, Bruyns 9741 (BOL).

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